

REMARKS

This Amendment is being submitted in response to the Office Action mailed September 9, 2004, relating to the above-identified application.

Applicants respectfully traverse and request reexamination and reconsideration. Claims 1-34 remain pending.

1. Summary of the Examiner's Rejections and Objections

Claims 1-34 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention

Claims 1, 2, 3, 7-15 and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,560,831 (Bladden et al.).

Claims 5, 6, 16 and 21-23 stand rejected under 35 U.S.C., § 103(a) as being unpatentable over Bladden et al.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bladden et al. in view of U.S. Patent 5,451,326 (Carlson et al.).

Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bladden et al. in view U.S. Patent 4,144,355 (Rawlings et al.).

Claim 17, 18 24-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bladden et al. in view of U.S. Patent Publication No. 2002/003112 A1 (Golden).

2. Applicants' Response to the Examiner's Rejections

Applicants have amended the claims in view of the Examiner's rejections to place this application in condition for allowance.

Applicant submits that *Bladden, Golden, Rawlings, Carlson*, or any other reference of record ("the Cited References") individually or in any combination thereof, fails to disclose, teach or suggest, either implicitly or explicitly, each and every element of Applicants' claim subject matter, as amended, and respectfully requests the Examiner to withdraw the rejections.

A. Rejections Under §102(b)

Anticipation can only be established by a single prior art reference which discloses each and every element of the claimed invention. *Structural Rubber Products Co., v. Park Rubber Co.*, 749 F.2d 7070; 233 U.S.P.Q. 1264 (C.A.F.C. 1984). The test for anticipation requires that all of the claimed elements must be found in exactly the same situation and united in the same way to perform the same function in a single unit of the prior art. *Studiengesellschaft Kohle, m.b.H. v. Dart Industries, Inc.*, 762 F.2d 724, 726 220 U.S.P.Q. 841 at 842 (C.A.F.C. 1984). Anticipation cannot be predicated on teachings in a reference that are vague or based on conjecture. *Datascope Corp. v. SMEC Inc.*, 594 F. Supp. 1036; 224 U.S.P.Q. 694, 698 (D.N.J. 1984).

B. Rejections Under § 103(a)

It is well-established that to establish prima facie obviousness, all the claim limitations must be taught or suggested by the prior art. In addition, there must be some teaching, motivation or suggestion in either the prior art, or the references themselves to make the combination asserted by the Examiner.

In *In re Lee*, the Federal Circuit held that the Patent & Trademark Office cannot rely on conclusory statements when dealing with particular

combinations of prior art and specific claims, but must set forth the rationale on which it relies. 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002).

“When patentability turns on the questions of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. *See, e.g., McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 U.S.P.Q.2d 1001, 1008 (Fed. Cir. 20010 (‘the central questions is whether there is a reason to combine [the] references,’ a question of fact drawing on the *Graham* factors)).”

“The factual inquiry whether to combine references must be thorough and searching.” *Id.* It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. *See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 299 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000) (‘a showing of a suggestion, teaching, or motivation to combine the prior art references is an “essential component of an obviousness holding”’ (quoting *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998))); *In re Dembiczak*, 175 F.3d 994, 999 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999) (‘Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.’); *In re Dance*, 160 F.3d 1339, 1343, 48 U.S.P.Q.2d 1635, 1637 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination

that was made by the application); *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988) (“teachings of references can be combined *only* if there is some suggestion or incentive to do so.”) (emphasis in original) (quoting *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984)).”

“The need for specificity pervades this authority. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000) (‘particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed’); *In re Roufeet*, 149 F.3d 1350, 1359, 47 U.S.P.Q.2d 1453, 1459 (Fed. Cir. 1998) (‘even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.’); *In re Fritch*, 972 F.2d 1260, 1265, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination ‘only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references’).”

Omission of a relevant factor required by precedent is both legal error and arbitrary agency action.

One case, *In re Bozek*, 57 C.C.P.A. 713, 416, F.2d 1385, 163 U.S.P.Q. 545 (1969), mentions “common knowledge and common sense.” However, *Bozek* did not hold that common knowledge and common sense are a substitute for evidence, but only that they may be applied to analysis of the evidence. Further, *Bozek* did not hold that objective analysis, proper authority, and reasoned findings can be omitted from Board decisions. Moreover, *Bozek* does not after thirty-two years of isolation, outweigh the dozens of rulings of the Federal Circuit and the Court of Customs and Patent Appeals that determination of patentability must be based on evidence. This court has remarked, in *Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1356, 51 U.S.P.Q.2d 1415, 1421 (Fed. Cir. 1999), that *Bozek*’s reference to common knowledge ‘does not in and of itself make it so’ absent evidence of such knowledge.

Measuring a claimed invention against the standard established in 35 U.S.C. §103 requires the oft-difficult, but critical step of casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references in the then-accepted wisdom in the field. See, e.g., *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Close adherence to this methodology is especially important in the case of less technologically complex inventions, where the very ease with which the invention can be understood may prompt one “to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.” *Id.*

Case law makes it clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. *In re Dembiczak*, 50 U.S.P.Q. 2d 164, 1617 (Fed. Cir. 1999). Combining prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability - the essence of hindsight. *Id*; *See, e.g., Interconnect Planning Corp. v. File*, 774 F.2d 1132, 1138, 227 U.S.P.Q. 543, 547 (Fed. Cir. 1985). Evidence of a suggestion, teaching or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, although "the suggestion more often comes from the teachings of the pertinent references." *Dembiczak* at 1617; *In re Roffet*, 149 F.3d 1350, 1359, 47 U.S.P.Q. 2d 1453, 1459 (Fed. Cir. 1998) ("The board must identify specifically...the reasons one of ordinary skill in the art would have been motivated to select the references and combine them").

The showing of such suggestion, teaching or motivation must be clear and particular. *Dembiczak* at 1617 (emphasis added); *See, e.g., C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q. 2d 1225, 1232 (Fed. Cir. 1998).

Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." *Dembiczak* at 1617; *See, e.g. Elmurry v. Arkansas, Power & Light Co.*, 995 F.2d 1576, 1578, 27 U.S.P.Q. 2d

1129, 1131 (Fed. Cir. 1993); *In re Sichert*, 566 F.2d 1154, 1164, 196 U.S.P.Q. 207, 217 (CCPA 1977).

Therefore, the Examiner must make particular findings regarding the locus of the suggestion, teaching or motivation to confine the prior art references. *Dembiczak* at 1617 (emphasis added).

C. Rejection of Claims 1-34 Under 35 U.S.C. § 112

Applicants have amended independent claims 1, 21, 24 and 32 and cancelled claim 15 to overcome the Examiner's rejections under 35 U.S.C. 112. Accordingly, Applicants submit that the Examiner's rejections have been overcome and request that the Examiner withdraw his rejections.

D. Rejection of Claims 1-3, 5, 5-16, 19 and 21-23

The Examiner has rejected the above-mentioned claims under 35 U.S.C. 102(b) or 35 U.S.C. 103(a) in view of *Bladden*.

The process as defined in independent claims 1 and 21, as amended, calls for, among other things:

“...adding an inorganic coagulant polymer ... and ... a synthetic organic polymer ... a plurality of solid particles each having a size of approximately 50 microns, a weight of approximately 0.99 to 1.004 grams per millimeter and a viscosity less than 50 centipose per second ... a generally tubular microfiltration membrane having fluid flow of at least 250 GFD.”

The structure and associated functionality of the aforementioned limitation is not disclosed in the Cited References or any combination thereof. Nor has the Examiner provided recitation where the entirety of the aforementioned limitation is disclosed in the Cited References. Therefore,

independent claim 1 cannot be anticipated by and independent claim 21 cannot be obvious under the Cited References or any combination thereof. Applicants request a specific showing by the Examiner of the particularly locus of the disclosure or teaching of the aforementioned limitation. Absence such a showing, the anticipation and obviousness rejections by the Examiner are proper under 35 U.S.C. §§ 102(b) and 103(a) and MPEP § 706.

Bladden discloses treating waste water with a coagulant. (Column 5, line 40). *Bladden* then goes on to identify numerous different coagulants that may be used as alternatives for the one coagulant used in connection with his invention. In particular,

“...the polymer in tank 19 is removed by pump 22. Water can be introduced into the pump discharged through line 25 and the water flow can be controlled by valve 24. The water and coagulant can be thoroughly mixed by passing through a suitable device such as a static mixer 26.” (Column 6, lines 18-24).

No where in *Bladden* is it taught or suggested that the coagulant may be a mixture of polymers as presently claimed by the Applicants, nor any of the other aforementioned limitations. In accordance with MPEP § 2144, Applicants believe that they have specifically pointed out the errors in the Examiner’s rejection and request that the Examiner provide specific citation of each and every element of the aforementioned limitations and the parts alleged to be rearranged by documentary proof from the record.

Consequently, Applicants submit that the Cited References or any combination thereof do not render the invention as defined in amended independent claims 1 and 21 anticipated or obvious, and the Cited References and any combination thereof fail to disclose, teach or suggest a process having

the structure and functionality as defined in amended claims 1 and 21. Accordingly, reconsideration or withdrawal of the rejection of amended independent claims 1 and 21 is respectfully requested.

Claims 2-20, 22-23, directly or indirectly, depend upon or include all limitations of amended independent claims 1 and 21, respectively, and are allowable at least for the reasons associated with amended independent claims 1 and 21 respectively. Accordingly, reconsideration or withdrawal of the rejection of claims 1-23 as respectfully requested.

E. Rejection of Claims 24-34

Claims 24-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Bladden* in view of *Golden*. As set forth above, Applicants submit that *Bladden* fails to teach the aforementioned limitations of independent claims 1 and 21 that also are present in independent claims 24 and 32. Consequently, Applicants submit that *Bladden*, *Golden* or any combination thereof with any of the Cited References does not render the inventions as defined in amended independent claims 24 and 32 at least for the reasons set forth above with respect to amended independent claims 1 and 21. Accordingly, reconsideration or withdrawal of the rejections of amended independent claims 24 and 32 is respectfully requested.

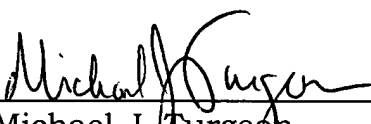
Claims 25-31, 33 and 34, directly or indirectly, depend upon and include all limitations of amended independent claims 24 and 32, respectively, and are allowable at least for the reasons associated with amended independent claims 24 and 32 respectively. Accordingly, reconsideration or withdrawal of the rejection of claims 24-34 is respectfully requested.

CONCLUSION

Based on the above amendments and remarks, the Applicants submit that claims 1-14, and 16-34 are now in proper condition for allowance and such action is earnestly solicited.

The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to Deposit Account No. 22-0259 or any payment in connection with this communication, including any fees for extension of time, which may be required. The Examiner is invited to call the undersigned if such action might expedite the prosecution of this application.

Respectfully submitted,

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